

20010510.qrp v02_n185.qrl.20010510

Date: Thu, 10 May 2001 19:03:06 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 2185

QRP-L Digest 2185

Topics covered in this issue include:

- 1) [97947] Need info on Mini-Com SSB Tranceiver
by Jim Larsen AL7FS <AL7FS@pobox.alaska.net>
- 2) [97948] Re: WPM and dit duration
by "laura halliday" <marsgal42@hotmail.com>
- 3) [97949] Re: 40M monoband no-tuner SLV?
by David Gauding <david.gauding@bbs.galilei.com>
- 4) [97950] Re: WPM and dit duration
by "w8diz" <w8diz@fpqrp.com>
- 5) [97951] Re: Concern with "solar power" sign up
by "Steve Yates, AA5TB" <aa5tb@arrl.net>
- 6) [97952] list problems
by "Russell White" <lwnphx@peoplepc.com>
- 7) [97953] Re: WB8RCR QSL Maker Software Question
by "Henry Knoll" <knoll003@tc.umn.edu>
- 8) [97954] New 'Tech Notes' Soldering Article by N0SS
by Eric Swartz WA6HHQ - Elecraft <erics@elecraft.com>
- 9) [97955] New 'Tech Notes' Soldering Article by N0SS
by Eric Swartz WA6HHQ - Elecraft <eric@elecraft.com>
- 10) [97956] TOROIDS
by "w8diz" <w8diz@fpqrp.com>
- 11) [97957] Re: WPM and dit duration
by "laura halliday" <marsgal42@hotmail.com>
- 12) [97958] Re: WPM and dit duration
by "Brian Murrey" <bmurrey@amexol.net>
- 13) [97959] Re: [fpqrp] TOROIDS
by "Brian Murrey" <bmurrey@amexol.net>
- 14) [97960] SMK-1 now operating
by "Delbert Long" <ad6we@hotmail.com>
- 15) [97961] Re: WPM and dit duration
by "Paul Christensen" <paulc@mediaone.net>
- 16) [97962] RE: WPM and dit duration
by Nick Kennedy <nkennedy@tcainternet.com>
- 17) [97963] FDIM 2001
by "Kenneth Evans" <w4du@mediaone.net>
- 18) [97964] INRAD Filters in a 706?
by "Paul Gerhardt" <pgerhardt@hotmail.com>
- 19) [97965] Re: What Ever Happened to the WARC-bler Project???

by "George Heron N2APB" <n2apb@erols.com>

20) [97966] New Embedded Research Contact Info
by Embedded Research <embres@mindspring.com>

21) [97967] Re: WPM and dit duration
by "George, W5YR" <w5yr@att.net>

22) [97968] SEC booked for Superfest 2001!!!
by "Rod Cerconey" <n0rc@hotmail.com>

23) [97969] Re: NiMH batteries can be safely trickled charged!
by Bruce Grubbs <n7ceeqrp@earthlink.net>

24) [97970] For Sale: Elecraft K2 (Built)
by "Brian P. Mileschosky" <n5zgt@swcp.com>

25) [97971] Re: WB9LPU paddles
by "Chuck Adams, K7Q0" <k7qo@earthlink.net>

26) [97972] Book Deals
by "Chuck Adams, K7Q0" <k7qo@earthlink.net>

27) [97973] Re: WPM and dit duration
by Harris Keith E CONT CNIN <harris_k@crane.navy.mil>

28) [97974] NorCal 20 VFO Problems
by K5BDZ@aol.com

29) [97975] Re: INRAD Filters in a 706? SUMMARY
by "Rod Cerconey" <n0rc@hotmail.com>

30) [97976] RFI: 'Lil RASCAL' PSK-31 interface
by "Rod Cerconey" <n0rc@hotmail.com>

31) [97977] Re: 'Lil RASCAL' PSK-31 interface
by "Brian" <bmurrey@amexol.net>

32) [97978] Milliwatt totals so far.....
by "George Osier" <gosier@twcnny.rr.com>

33) [97979] NEQRP CW Net, Thursday, 3 May, 8:30 PM EDT, 3.561MHz (Note time change)
by Chuck Ludinsky <cjl@mitre.org>

34) [97980] Re: NiMH batteries can be safely trickled charged!
by "Mike Yetsko" <myetsko@insydesw.com>

35) [97981] Re: NiMH batteries can be safely trickled charged!
by "Brian" <bmurrey@amexol.net>

36) [97982] Re: NiMH batteries can be safely trickled charged!
by "Brian" <bmurrey@amexol.net>

37) [97983] Re: NiMH batteries can be safely trickled charged!
by "Mike Yetsko" <myetsko@insydesw.com>

38) [97984] Re: NiMH batteries can be safely trickled charged!
by "Brian" <bmurrey@amexol.net>

39) [97985] Re: 'Lil RASCAL' PSK-31 interface
by "Tom Pennebaker" <n4rs@netpath-rc.net>

40) [97986] Re: NorCal 20 VFO Problems
by Pete Burbank <plburbank@kih.net>

41) [97987] RE: NiMH batteries can be safely trickled charged!
by Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>

42) [97988] 2M collinear vert ant
by "Larry Wise" <lewise@txwises.com>

- 43) [97989] Re: 'Lil RASCAL' PSK-31 interface
by "Stephen M. King" <frastephen@home.com>
- 44) [97990] NorCal toroids arrive
by agtaylor@llnl.gov
- 45) [97991] RE: NiMH batteries can be safely trickled charged!
by "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
- 46) [97992] Re: 2M collinear vert ant
by Brendan Minish <EI6IZ@oceanfree.net>
- 47) [97993] Fwd: Re: 'Lil RASCAL' PSK-31 interface
by "Ed Manuel (N5EM)" <n5em@flash.net>
- 48) [97994] RE: WPM and dit duration
by "laura halliday" <marsgal42@hotmail.com>
- 49) [97995] Re: NorCal toroids arrive
by "Russ Hines" <wb8zcc@one.net>
- 50) [97996] Results of the MAY SPARTAN SPRINT
by Russ Carpenter <russ@natworld.com>
- 51) [97997] crystals
by "Delbert Long" <ad6we@hotmail.com>
- 52) [97998] I just don't get it...
by preacher102677@juno.com
- 53) [97999] This Fourier Transform stuff
by "Paul Harden, NA5N" <na5n@rt66.com>
- 54) [98000] OT: SGC "Secret" in Ad
by "Jerry L. Bartachek" <jsbarta@lisco.com>
- 55) [98001] RE: This Fourier Transform stuff
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
- 56) [98002] Re: [GQRP] RF Filters and things
by George Gingell <k3tks@u1.abs.net>
- 57) [98003] RE: crystals
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
- 58) [98004] Re: 2M collinear vert ant
by "Mike Yetsko" <myetsko@insydesw.com>
- 59) [98005] more keys
by "Mark Paley" <mpaley@wcnet.org>
- 60) [98006] Re: I just don't get it...
by Bruce Muscolino <w6toy@erols.com>
- 61) [98007] NorCal pizza pizza
by Mike Gipe <mgipe@reliablemeters.com>
- 62) [98008] QRP DX
by "John L. Sielke" <w2agn@pobox.com>
- 63) [98009] I need to contact Seab Lyon - off topic - sorry!
by "Graham Firth" <graham@g3mfj.fsnet.co.uk>
- 64) [98010] Re: This Fourier Transform stuff
by "Mark Fancher" <mmfancher@earthlink.net>
- 65) [98011] Now Showing: The ARS Sojourner
by Richard Fisher <ki6sn@yahoo.com>
- 66) [98012] Magnifying Glasses
by "Ed Tanton" <n4xy@att.net>

67) [98013] Re: This Fourier Transform stuff
by "Davies, Doug A FOR:EX" <Doug.Davies@gems3.gov.bc.ca>
68) [98014] Re: NorCal toroids arrive
by DYARNES@aol.com

Date: Wed, 09 May 2001 15:23:45 -0800
From: Jim Larsen AL7FS <AL7FS@pobox.alaska.net>
To: "qrp-1@lehigh.edu" <qrp-1@lehigh.edu>, Northern Georgia QRP <nogaqrp@qth.net>
Subject: [97947] Need info on Mini-Com SSB Transceiver
Message-ID: <3AF9D181.C1F2288@pobox.alaska.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have recently ended up with a surplused, old SSB transceiver. It was manufactured by Justin, Inc of S. El Monte, CA around 1980-83. This has the 80 meter board for 5.5 MHz. It is call "Mini-com Transistorized Transceiver (Serial #0013).

Is there a remote chance there is still a schematic and manual around for this radio? Even a scanned or copy machine copy of the schematic would help.

If no documentation is available, I would be interested in any old memories of this rig. I hope to modify it to use on the two Alaska SSB nets on 3.920 and 3.933 MHz if I can figure it all out. The transceiver switches between two crystals so this would be a good use for the radio as we have two SSB nets each evening up here.

I did hear back from Justin, Inc. and learned a bit of extra information.

>From the hand written note:
=====
05/03/01

Dear Jim,

The Mini-com went out of production some 17 years ago. It's main use was a airdrop to remote villages in South America. The minicom, a small 12 volt battery and a dipole fabed from a length of twin-ohm. Aircraft would visit a village, circle & receive orders for medical supply.

Our engineer responsible for the design retired years ago with cancer. We gave him the mini-com program to keep his mind active. He died some 6 years ago & we have no records of any kind.

Best bet would be the net or hams.

Best regards,
Frank R. Justin

=====
So there you have it, folks. Does anyone know any more about this radio or have documentation on it?

Thank you.

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

Date: Wed, 09 May 2001 23:43:41
From: "laura halliday" <marsgal42@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [97948] Re: WPM and dit duration
Message-ID: <F133DaJHFzrK0pWHItq00001b9d@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Chuck Adams K7Q0 wrote:

>Advanced: Assume a string of dits as a square wave.
>Use Fourier Analysis to determine the bandwidth re-
>quired at each speed for a continuous string which
>you often hear on the air. :-)

The Fourier Transform of the signal will give you the frequencies the signal occupies, but it doesn't tell you how much power is on each frequency. For that you need power spectral density. This is usually evaluated with the Wiener-Khinchine theorem, which states that the power spectral density is the Fourier Transform of the signal's autocorrelation.

A signal can thus be very broad, but if the power spectral density is low, nobody will notice it or be interfered with by it unless they go looking for it. GPS (and spread-spectrum, generally) is a good example of this.

All the usual references: Haykin, Proakis, Oppenheim,

Schafer, etc. Haykin points out that the relations usually ascribed to Wiener and Khinchine were developed some years earlier by one A. Einstein, but nobody paid any attention at the time...

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Date: Wed, 09 May 2001 18:52:52 -0500
From: David Gauding <david.gauding@bbs.galilei.com>
To: qrp-l@lehigh.edu
Subject: [97949] Re: 40M monoband no-tuner SLV?
Message-ID: <5.1.0.14.0.20010509182353.00a71080@bbs.galilei.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello Kenyon,

The original St. Louis Vertical isn't resonant on any band. The match is handled with a tuner and a twinlead feedline.

The combined mechanical length of the coil and upper radiator is approximately 66'. I have no idea where it resonates at that length.

If you want a 40M only antenna you might try a St. Louis Pocket Vertical. It features a homebrew air-wound tapped St. Louis Coil covering 10-40M. But, can be built as a dedicated 40M antenna if you prefer.

The article is in the Spring 2000 issue of QRPp. Also, you can build a St. Louis Coil to fit the SD-20 or Black Widow poles if portability is not a major consideration.

Trusting this is useful information for you.

de Dave, NF0R nf0r@slacc.com

At 02:46 PM 5/9/01 -0400, you wrote:

>Greetings,
>
>Anybody put one of these together? I've looked through the archives and
>around the WWW, with no luck (excepting the Norcal site). Any
>pointers?

Date: Wed, 9 May 2001 19:55:38 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97950] Re: WPM and dit duration
Message-ID: <000a01c0d8e3\$8c78d9c0\$62911b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Duh....

I thought I was technically "informed"...

Guess I'm just another novice - way over my head.

Does anybody understand this stuff? :)

----- Original Message -----
From: "laura halliday" <marsgal42@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, May 09, 2001 11:43 PM
Subject: Re: WPM and dit duration

> Chuck Adams K7QO wrote:
>
> >Advanced: Assume a string of dits as a square wave.
> >Use Fourier Analysis to determine the bandwidth re-
> >quired at each speed for a continuous string which
> >you often hear on the air. :-)
>
> The Fourier Transform of the signal will give you the
> frequencies the signal occupies, but it doesn't tell
> you how much power is on each frequency. For that you
> need power spectral density. This is usually evaluated
> with the Wiener-Khinchine theorem, which states that
> the power spectral density is the Fourier Transform

> of the signal's autocorrelation.
>
> A signal can thus be very broad, but if the power
> spectral density is low, nobody will notice it or be
> interfered with by it unless they go looking for it.
> GPS (and spread-spectrum, generally) is a good example
> of this.
>
> All the usual references: Haykin, Proakis, Oppenheim,
> Schafer, etc. Haykin points out that the relations
> usually ascribed to Wiener and Khinchine were devel-
> oped some years earlier by one A. Einstein, but nobody
> paid any attention at the time...
>
> Laura Halliday VE7LDH "Que les nuages soient notre
> Grid: CN89mg pied a terre..."
> ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte
>

> Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.
>
>

Date: Wed, 09 May 2001 18:59:14 -0500
From: "Steve Yates, AA5TB" <aa5tb@arrl.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97951] Re: Concern with "solar power" sign up
Message-ID: <00bf01c0d8e4\$0dbb5da0\$4d703ed8@pavilion>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit

I use Yahoo! for all kinds of stuff and have never received any SPAM that I can say originated from them since I never receive SPAM on the e-mail address that I gave them. Just be sure to UNcheck the box asking if you want to receive news and advertisements from them. I have dealt with Yahoo! for several different purposes and have never had any problems. Even my Web pages are on their server and I have found them to be much more reliable than my (\$\$\$) SWBell ISP.

73,
Steve Yates - AA5TB
Fort Worth, Texas
Grid Square: EM12gs
aa5tb@arrl.net
<http://www.geocities.com/aa5tb/>

----- Original Message -----

From: "Mike Yettsko" <myetsko@insydesw.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, May 09, 2001 1:26 PM
Subject: Re: Concern with "solar power" sign up

> Be aware that I personally signed onto Yahoo about 6 weeks ago
> for another purpose.
>
> SPAM started flooding my account the next day.
>

Date: Wed, 9 May 2001 17:18:59 -0700
From: "Russell White" <lwnphx@peoplepc.com>
To: <qrp-l@lehigh.edu>
Subject: [97952] list problems
Message-ID: <MABBJDLBGBKGHKKFBDGPEENPCBAA.lwnphx@peoplepc.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

First, my appologies for sending this to the list, but I have sent a number of emails to addresses in the help file and have received no replies. here is a copy of what I have sent and any help would be appreciated - off line please.

Russell White AB7JX

Hello,
I am trying to unsubscribe at ruswhite@freewwwweb.com, but there is one problem. Freewwwweb went away and juno picked up their email while retaining the @freewwwweb.com address. When I send an instruction to unsubscribe, it comes from ruswhite1@juno.com which the list program says is not a valid subscriber address. I am now currently resubscribed at lwnphx@peoplepc.com and I would really like to stop the list from sending to ruswhite@freewwwweb.com
could you help me?

Thank You
Russell White

Date: Wed, 9 May 2001 19:25:09
From: "Henry Knoll" <knoll1003@tc.umn.edu>
To: qrp-l@Lehigh.EDU
Subject: [97953] Re: WB8RCR QSL Maker Software Question
Message-ID: <iss.3771.3af9dfe9.e6c9e.1@amethyst.tc.umn.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The program will print four up if you print on legal size stock and print in landscape mode.

73

Henry

Date: Wed, 09 May 2001 17:31:08 -0700
From: Eric Swartz WA6HHQ - Elecraft <erics@elecraft.com>
To: Elecraft mail list <elecraft@qth.net>, QRP-L <qrp-l@lehigh.edu>, GQRP <gqrp@egroups.com>
Subject: [97954] New 'Tech Notes' Soldering Article by N0SS
Message-ID: <3AF9E14C.938ABA35@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

We have added a neat soldering article (pdf) to our 'Tech Notes' section at <http://www.elecraft.com>

It is titled: 'What to do, and what NOT to do, to get excellent solder joints', By Tom Hammond, N0SS (Thanks Tom!)

This is a great article and should go a long way to helping new builders (or those of us who need a refresher course) make perfect joints the first time. Tom includes color pictures of good, and BAD, solder joints and component mounting.

Links to it are also on our Builder Resource Page.

73, Eric WA6HHQ

--

<http://www.elecrafter.com>

Date: Wed, 09 May 2001 17:35:34 -0700
From: Eric Swartz WA6HHQ - Elecraft <eric@elecraft.com>
To: Elecraft mail list <elecraft@qth.net>, QRP-L <qrp-l@lehigh.edu>, GQRP
<gqrp@egroups.com>
Subject: [97955] New 'Tech Notes' Soldering Article by N0SS
Message-ID: <3AF9E256.2874E9E5@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

We have added a neat soldering article (pdf) to our 'Tech Notes' section at
<http://www.elecrafter.com>

It is titled: 'What to do, and what NOT to do, to get excellent solder joints',
By Tom Hammond, N0SS (Thanks Tom!)

This is a great article and should go a long way to helping new builders (or
those of us who need a refresher course) make perfect joints the first time. Tom
includes color pictures of good, and BAD, solder joints and component mounting.

Links to it are also on our Builder Resource Page.

73, Eric WA6HHQ

--

<http://www.elecrafter.com>

Date: Wed, 9 May 2001 20:37:46 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>, "fpqrp" <fpqrp-
l@mpna.com>
Subject: [97956] TOROIDS
Message-ID: <003701c0d8e9\$6f154b60\$62911b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hey Gang,

If U missed out on the NORCAL toroid offer and are still in need of some, I'll have a bunch at Dayton this year. Look for the Flying Pigs QRP Club table in the parking lot.

<http://kitsandparts.com>

Diz, W8DIZ, Loveland, OH FP#-1

Date: Thu, 10 May 2001 00:36:15
From: "laura halliday" <marsgal42@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [97957] Re: WPM and dit duration
Message-ID: <F226zn0xbkK0rGmjpFr00001c17@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

W8DIZ wrote:

>I thought I was technically "informed"..
>
>Guess I'm just another novice - way over my head.
>
>Does anybody understand this stuff? :)

Power spectral density is 4th year EE undergrad stuff.
Undergrads use Wiener-Khinchine. Grad students prove
Wiener-Khinchine.

Here's the URL for the course I studied this stuff in
<<http://www.comm.toronto.edu/~dimitris/ece1511/>>

Weird and wonderful stuff..."Project 1" implements
the same algorithms I did in my Project 1, but the
application is different.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Date: Wed, 9 May 2001 19:46:29 -0500
From: "Brian Murrey" <bmurrey@amexol.net>
To: <marsgal42@hotmail.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97958] Re: WPM and dit duration
Message-ID: <002301c0d8ea\$a7b55680\$d2372bd1@iquest.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Wow...and it thought a dit was a dit and a dah was a dah.

Silly me.

Can we use Werner Von Kliniker theorem to find my missing socks?

72 <grin>

----- Original Message -----

From: "laura halliday" <marsgal42@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, May 10, 2001 12:36 AM
Subject: Re: WPM and dit duration

> W8DIZ wrote:
>
> >I thought I was technically "informed"..
> >
> >Guess I'm just another novice - way over my head.
> >
> >Does anybody understand this stuff? :)
>
> Power spectral density is 4th year EE undergrad stuff.
> Undergrads use Wiener-Khinchine. Grad students prove
> Wiener-Khinchine.
>
> Here's the URL for the course I studied this stuff in
> <<http://www.comm.toronto.edu/~dimitris/ece1511/>>
>
> Weird and wonderful stuff..."Project 1" implements
> the same algorithms I did in my Project 1, but the
> application is different.
>

> Laura Halliday VE7LDH "Que les nuages soient notre
> Grid: CN89mg pied a terre..."
> ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte
>
>

> Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.
>
>

Date: Wed, 9 May 2001 19:47:59 -0500
From: "Brian Murrey" <bmmurrey@amexol.net>
To: "w8diz" <w8diz@fpqrp.com>, "Low Power Amateur Radio Discussion" <qrp-
l@Lehigh.EDU>, "fpqrp" <fpqrp-l@mpna.com>
Subject: [97959] Re: [fpqrp] TOROIDS
Message-ID: <002b01c0d8ea\$dd128820\$d2372bd1@iquest.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hey Diz...how about you kitting together a "PigPack" of common roids and
letting us buy them from you?

For a few freebies and some help with my MP20 I would even volunteer to pack
them and ship them for you. (you pay postage and shipping of course).

What say mate?

73

----- Original Message -----
From: "w8diz" <w8diz@fpqrp.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>; "fpqrp"
<fpqrp-l@mpna.com>
Sent: Wednesday, May 09, 2001 7:37 PM
Subject: [fpqrp] TOROIDS

> Hey Gang,
>
> If U missed out on the NORCAL toroid offer and are still in need of some,
> I'll have a bunch at Dayton this year. Look for the Flying Pigs QRP Club
> table in the parking lot.
>
> <http://kitsandparts.com>

>
> Diz, W8DIZ, Loveland, OH FP#-1
>
>
> -To unsubscribe, mail to majordomo@fpqrp.com, msg: unsubscribe fpqrp-1 -
>

Date: Thu, 10 May 2001 00:53:21 -0000
From: "Delbert Long" <ad6we@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [97960] SMK-1 now operating
Message-ID: <F110HfqR77bieLYCT4a00001b7c@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Okay, I finally got it working!

Who lives near So. California and would like to make a sked? So far, I have been trying late at night (9:30 or so...) when there isn't too much activity outside my condo where someone might complain about me spreading wires around!

Next weekend (May 19 / 20) I will be in the mountains near Big Bear Lake and intend to try from there. Might make some NVIS attempts during the day as well.

Hope to CU all on the air!

Delbert Long, AD6WE
2111 Cheyenne Way Unit 9
Fullerton, CA 92833-4912
Grid Square DM13aw

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Wed, 9 May 2001 21:10:46 -0400
From: "Paul Christensen" <paulc@mediaone.net>
To: <marsgal42@hotmail.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97961] Re: WPM and dit duration

Message-ID: <003b01c0d8ee\$0be8dc00\$6401a8c0@paulch>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> The Fourier Transform of the signal will give you the
> frequencies the signal occupies, but it doesn't tell
> you how much power is on each frequency.

But the Fourier analysis will define the amplitude of each sine function relative to the complex composite function, this being a square-wave in the instant case. So, it would seem the occupied spectral bandwidth of the complex function can be determined by calculating the resulting bandwidth from the frequency and amplitude of each individual sine function.

-Paul, W9AC

Date: Wed, 9 May 2001 20:20:15 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [97962] RE: WPM and dit duration
Message-ID: <01C0D8C5.75FDD420.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

hm .. I thought the Fourier transform did (does) give the amplitude of each frequency component.

Of course, I guess some time domain functions don't transform into a series of discrete frequencies but instead have a continuous spectrum of frequency domain components--like pink noise or whatever. That's where power spectral density and so on would come in.

But I was (and remain) afraid to take Chuck's challenge. Too complex. I guess the square wave is a "perfect" square, but it's just the envelope, right? And does it make a difference if it switches the RF off and on at zero crossings or ...? Probably does. Maybe best handled with a string of dits and a spectrum analyzer.

72--Nick, WA5BDU

-----Original Message-----

From: laura halliday [SMTP:marsgal42@hotmail.com]

The Fourier Transform of the signal will give you the frequencies the signal occupies, but it doesn't tell you how much power is on each frequency.

Date: Thu, 10 May 2001 01:28:12 +0100

From: "Kenneth Evans" <w4du@mediaone.net>

To: "GQRP" <GQRP@yahooogroups.com>, "QRP-1 Discussion" <qrp-1@Lehigh.EDU>

Subject: [97963] FDIM 2001

Message-ID: <00ad01c0d8e8\$1c9c6e00\$6501a8c0@atl.mediaone.net>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Only a week to go until we kick off FDIM 2001! I just updated the web page with a complete title to George Heron, N2APB's talk. Originally we gave it the generic title of PSK 31. But this will be much more! The title is : "Portable PSK Transceiver Using a Single Board Controller". You'll not want to miss this or the other fine talks. Check them out at <http://www.qrparci.org/fdim64.html#fdim> .

The list of attendees has just been updates with registrations received through today. It can be found at <http://www.qrparci.org/fdim2001.htm> . If you see mistakes please let me know. I will update the list again on Monday night. If you plan on pre-registering by mail or Pay Pal, please do so such that I receive it no later than Monday, May 14. After that I will be traveling. As usual, we will welcome walk-ins. If you cannot come and want a copy of the Proceedings, they will be available at FDIM for \$12.00. After the event, they will be available from the QRPARCI Toy Store. I am looking forward to seeing all of you next week.

72/3,

Ken W4DU

QRP ARCI #696, GQRP, NOGA, NORCAL, ARRL-Life

Date: Wed, 09 May 2001 21:32:51 -0400

From: "Paul Gerhardt" <pgerhardt@hotmail.com>

To: qrp-1@Lehigh.EDU

Subject: [97964] INRAD Filters in a 706?

Message-ID: <F2614maEqxGGmNN79xa00001d09@hotmail.com>

Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Rod,

I had an INRAD CW filter wired in an IC-735 (sounded very nice btw) I kept it when I got my 706 thinking I could use it but after talking to Martha (?) at INRAD she said that although it works well electrically it was almost impossible to get in the case! She did say that you COULD make it fit (she had heard) by removing the speaker. I decided that this was a bad trade off for me so I sold the filter and now have a 817 for CW QRP with the Yaesu CW filter which is not nearly as 'tight' sounding as the INRAD but the INRAD filter for the 735 was probably at least 4 times the volume of the 817 filter. Marth said that some people had also wired them up for external use.

73 Paul K3PG
Centreville MD on the Beautiful Eastern Shore of MD

Date: Tue, 8 May 2001 19:31:22 -0600
From: "Rod Cerkoney" <n0rc@hotmail.com>

I see INRAD makes filters for the IC-746. The 706 & 746 share the same 9MHz filters. So has anyone tried to mount an appropriate INRAD filter in a 706? Two concerns: filter body size & the fact that INRAD filter are wire-in, not drop-in.

73, Rod N0RC
Ft Collins, CO

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Wed, 9 May 2001 21:34:15 -0400
From: "George Heron N2APB" <n2apb@erols.com>
To: "NJQRP" <NJQRP@njqrp.org>, "QRP-L" <qrp-l@lehigh.edu>
Subject: [97965] Re: What Ever Happened to the WARC-bler Project???
Message-ID: <006201c0d8f1\$af01c2a0\$c4c23ad0@ghlpt4>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Plans are underway through a combined effort of the Iowa QRP Club designers (WOODS/W0FMS) and the NJQRP Club to sell a limited number of integrated "30m Mods + 80m Warbler" kits at Dayton's FDIQRP Forum.

After that, by mutual agreement of the designers and Dave Benson, NN1G (designer and owner of the PSK-xx series of products), Benson's "Small Wonder Labs" will be making available a commercial version of the PSK-30 WARCbler later this summer.

For the intrepid homebrewers among us, detailed analysis and plans for the WARCbler mods are detailed in an excellent QRP Homebrewer article contributed by W00DS and W0FMS. This issue #5 of QHB will be hitting the mail system to subscribers early next week.

73, George N2APB
n2apb@amsat.org

=====
I was quite excited about the WARC-bler project announcement a while back, that is, a kit of parts and crystals to take a PSK-80 Warbler to 30 meters ... anyone have any idea if it is still in the offing?? I have a newly acquired Warbler kit here waiting to do it!

Date: Wed, 09 May 2001 21:40:29 -0400
From: Embedded Research <embres@mindspring.com>
To: qrp-1@Lehigh.EDU
Cc: embres@frontiernet.net
Subject: [97966] New Embedded Research Contact Info
Message-ID: <3AF9F18D.DC8E8D36@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello all -

My internet provider got partially swallowed by the Earthlink/Mindpsring machine, so for the time being, you can reach Embedded Research at:

embres@mindspring.com

I apologize for the inconvenience. My old email address was shutdown a couple days ago, so if you have emailed me recently and are awaiting a reply, please try again at the above address.

Thanks and 73.
- Gary N2JGU

Embedded Research

Date: Wed, 09 May 2001 20:59:38 -0500
From: "George, W5YR" <w5yr@att.net>
To: paulc@mediaone.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [97967] Re: WPM and dit duration
Message-ID: <3AF9F60A.EA824B55@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

We need to make some distinction here between a transient burst of dits and a continuous sting of bits. The former is analyzed on a power spectral density basis with the comments by Laura being applicable. The latter can be analyzed by conventional Fourier analysis to obtain the power spectrum (not spectral density), etc.

Laura is correct, folks - this stuff is pretty elementary now even in undergrad courses, although I was in MIT grad school before getting into the finer points of spectral estimation, etc. courtesy Y.W. Lee's course and a few others.

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6

Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

Paul Christensen wrote:

>
> > The Fourier Transform of the signal will give you the
> > frequencies the signal occupies, but it doesn't tell
> > you how much power is on each frequency.
>
> But the Fourier analysis will define the amplitude of each sine function
> relative to the complex composite function, this being a square-wave in the
> instant case. So, it would seem the occupied spectral bandwidth of the
> complex function can be determined by calculating the resulting bandwidth from
> the frequency and amplitude of each individual sine function.
>
> -Paul, W9AC

Date: Wed, 9 May 2001 22:17:29 -0600
From: "Rod Cerkoney" <n0rc@hotmail.com>
To: <elecraft@qth.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, "ncarc-1" <ncarc@qth.net>
Subject: [97968] SEC booked for Superfest 2001!!!
Message-ID: <0E13KtdhQYZkx0jmfCH00000b24@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks,

No not the Securities & Exchange Commission--THE SPACE ENVIRONMENT CENTER!!!

This is the agency based in Boulder that does all the Space Weather Stuff: warnings alerts, forecasts...etc. See their Web site at:
<http://www.sel.noaa.gov/index.html>

I spoke with their representative today and completed the arrangements. They will be bringing a multimedia booth setup, to explain who they are, what they do and how we (Hams) can take advantage of it.

Exciting Stuff!

73, Rod N0RC
Ft Collins, CO

SuperFest 2001 14-Jul-2001
<http://www.qsl.net/n0rc/hamfest/hamfest.html>
BE THERE!

Date: Wed, 09 May 2001 21:47:09 -0700
From: Bruce Grubbs <n7ceeqr@earthlink.net>
To: Dan.Tayloe@motorola.com, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97969] Re: NiMH batteries can be safely trickled charged!
Message-ID: <5.1.0.14.0.20010509214315.00ad7db0@earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Dan,

I'm doing exactly that, with a 10 AA cell NiMH pack, 1500 mAh. I charge it with an old 1.8 watt panel and no controller. So far, it's working out fine. The pack never gets hot, and it's always topped up. When I use it on backpack trips to run the K1, it gets discharged a bit, then recharged from the panel carried on top of my pack. I tried that with NiCd's a few years ago, but the batteries lost most of their capacity from such abuse.

73
Bruce
N7CEE

Date: Wed, 9 May 2001 23:07:28 -0600
From: "Brian P. Mileschosky" <n5zgt@swcp.com>
To: <qrp-l@Lehigh.EDU>
Subject: [97970] For Sale: Elecraft K2 (Built)
Message-ID: <000701c0d90f\$1cb5fec0\$f804b8d8@hlw11>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang,

A Ham that I know has a built Elecraft K2 he would like to sell, and I offered to place the information on QRP-L for him.

Doug, K5CR of Albuquerque, New Mexico would like to sell his K2, which is built and aligned, and includes the KSB-2 SSB adaptor, and the KNB-2 noise blanker. He bought it last Christmas and finished building it about 6 weeks ago. He would like to recover as much of the cost as possible, so he is asking \$690.00, but he is willing to take offers.

If you are interested, please contact Doug via email at K5CR@arrl.net. Please do not email me about the radio, as I'm just the messenger! :-)

Thanks and 72,
Brian, N5ZGT

Boy Scouts of America Amateur Radio - N5ZGT
Eagle Scout 12/6/96 ARRL QRP: NorCal #1700 QRP-L #580 AK/QRP #125
ASM - Troop 41 Packet: N5ZGT PBBS, 145.01 MHz
OA Lodge 66 Albuquerque, New Mexico
Yah-Tah-Hey-Si-Kess <-W-W-W-< Brother, Kappa Sigma Fraternity
Please Visit my Homepage at: <http://www.unm.edu/~brianm>

Date: Thu, 10 May 2001 06:13:25 +0100
From: "Chuck Adams, K7Q0" <k7qo@earthlink.net>
To: mpaley@wcnet.org, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97971] Re: WB9LPU paddles
Message-ID: <5.0.2.1.0.20010510061047.009fba30@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have one of the WB9LPU paddles (a prototype) and use it regularly. It has blue paddles and a blue painted base. He does do a nice job and I'm sure the QRP group will be giving us lots of reviews at show and tell Friday and Saturday nights..... Guess I can now put some pics on the web page.

FYI

Chuck Adams, K7Q0 CP-60
Prescott, AZ k7qo@earthlink.net <http://www.qsl.net/k7qo>

TMPS-2001 Jan 12th -> April 15th, 2001 States = 49 DXCC = 15

States Needed AK DXCC --- K XE VE KH6 V73 HI3 FM5 OH3 C6 ZL1 C08 ZS6 EA8 EA7
PJ ZL2

Moving to Arizona? --- Bring your own water.

Date: Thu, 10 May 2001 06:31:51 +0100
From: "Chuck Adams, K7Q0" <k7qo@earthlink.net>
To: qrp-1@Lehigh.EDU
Subject: [97972] Book Deals
Message-ID: <5.0.2.1.0.20010510062525.00a66a00@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

Since the topic of EE courses came up.....

In my travels to Tucson I got an opportunity to visit the campus of the University of Arizona and the book store.

Since it was the end of the semester and finals were in full swing the bookstore was having a great sale of books. I picked up some very expensive books for only \$8 to \$20 each. We are talking heavy books like in EE, CS, Physics, and Mathematics.

Good thing I was driving the Explorer..... You can carry a lot of books in the back. :-)

So, if you are fortunate to live near a University, you might consider aperiodically dropping into their bookstore and browsing. I know it can be an expensive trip but books are so interesting and it is money well spent. IMHO. And I won't even get started on the used book stores.

FYI,

Chuck Adams, K7QO CP-60
Prescott, AZ k7qo@earthlink.net <http://www.qsl.net/k7qo>

TMPS-2001 Jan 12th -> April 15th, 2001 States = 49 DXCC = 15

States Needed AK DXCC --- K XE VE KH6 V73 HI3 FM5 OH3 C6 ZL1 C08 ZS6 EA8 EA7
PJ ZL2

Moving to Arizona? --- Bring your own water.

Date: Thu, 10 May 2001 06:33:14 -0500
From: Harris Keith E CONT CNIN <harris_k@crane.navy.mil>
To: "'qrp-1@lehigh.edu'" <qrp-1@lehigh.edu>
Subject: [97973] Re: WPM and dit duration
Message-ID:
<4F76B3D4A76AD111803B00A0C9893D9C06ED8D59@cninexchsrv05.crane.navy.mil>
MIME-Version: 1.0

Content-Type: text/plain

Brian,

Your socks probably fell through the hole in the hose zone layer. :^)

72/73 de N9KH

Date: Thu, 10 May 2001 07:38:29 EDT
From: K5BDZ@aol.com
To: qrp-1@lehigh.edu
Subject: [97974] NorCal 20 VFO Problems
Message-ID: <3e.b7f8b09.282bd7b5@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Am building a Norcal 20 kit (version 1.0) and the VFO is (has?) a problem...

All voltages are correct, all components correct, no solder bridges, etc.

The VFO did work for a very short time but was too low (4.965 MHz) so I spread turns of inductor, turned it back on and it won't work since. I have:

1. Replaced J310 (don't think it was the problem though)
2. Removed toroid and double checked to insure no broken wire, tap soldered OK, etc. and replaced
3. Double checked (touched up) all my solder joints
4. Checked to insure Poly caps - 120P and 180P - are OK...they are.
5. No components appear to be shorted
6. Scope just shows "non-working"
7. Freq meter shows "14 MHz" at output of FET but no change in freq when adjusting trimmer cap or 10 turn dial pot.

Ahhhh QRP - the great equalizer - about the time we think we're pretty good, along comes one of these little problems (probably simple to fix) that proceeds to inflict brain damage and bring us down to earth!

Now it's down to removing one part at a time to either check or replace it unless someone knows of a recurring problem with a part / board trace, etc or suggests something my FRUSTRATED mind is missing.

All suggestions welcome.

One bright light - My good (expensive) Weller de-solder station is still packed from the move, and as I went to take out the VFO FET, I reached into my give-away box and picked up the cheap little Radio Shack blue / yellow

plastic solder sucker to try it. Cheap? yes! Works like a charm! So it's now back in the keep-drawer. If you see one at a flea market for a quarter or so, it's a great investment.

Bill K5BDZ

Date: Thu, 10 May 2001 06:15:10 -0600
From: "Rod Cerkoney" <n0rc@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Cc: "Richard Brummer, K2JQ" <k2jq@bestweb.net>, "Ed Manuel \ (N5EM\)" <n5em@flash.net>, "Paul Gerhardt" <pgerhardt@hotmail.com>, "Nick Kennedy" <nkennedy@tcainternet.com>, "Bob Tellefsen" <n6wg@earthlink.net>
Subject: [97975] Re: INRAD Filters in a 706? SUMMARY
Message-ID: <0E74Ci6nx8dyDd30JXs00000c9f@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks,

Thanks all for your help on this matter.

For those lurking about for an answer: Not likely to work.

There is too little room in the 706 to mount the filter and wire it in. So as posted in another email, I stick with the Icom 500 filter for occasional CW work. And I may add a 1.9kHz filter for SSB.

The 2.4kHz included with the 706 will be dandy for DigiPan's wide frequency display.

Finally those wonder where to get more Inrad info, they have a nice web site at:

<http://www.qth.com/inrad>

73, Rod N0RC
Ft Collins, CO

SuperFest 2001 14-Jul-2001
<http://www.qsl.net/n0rc/hamfest/hamfest.html>
BE THERE!

----- Original Message -----

From: "Rod Cercone" <n0rc@hotmail.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Tuesday, May 08, 2001 07:31 PM

Subject: INRAD Filters in a 706?

> I see INRAD makes filters for the IC-746. The 706 & 746 share the same

> 9MHz filters. So has anyone tried to mount an appropriate INRAD filter

> in a 706? Two concerns: filter body size & the fact that INRAD filter

> are wire-in, not drop-in.

>

Date: Thu, 10 May 2001 06:19:46 -0600

From: "Rod Cercone" <n0rc@hotmail.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>, <icom@qth.net>

Subject: [97976] RFI: 'Lil RASCAL' PSK-31 interface

Message-ID: <0E227J7mgsQQIqrfFz8000000cbc@hotmail.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Folks;

Anybody have direct experience with this device, found at:

<http://www.packetradio.com/psk31.htm>

Seems like a pretty good deal at \$25, for all parts needed, including cables and connectors, to build a nice isolating PSK interface for my 706.

73, Rod N0RC

Ft Collins, CO

SuperFest 2001 14-Jul-2001

<http://www.qsl.net/n0rc/hamfest/hamfest.html>

BE THERE!

Date: Thu, 10 May 2001 08:29:29 -0400
From: "Brian" <bmmurray@amexol.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [97977] Re: 'Lil RASCAL' PSK-31 interface
Message-ID: <009801c0d94c\$dc4d4fd0\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Looks like a SWEET deal. I'm going to get one for my Ten Tec Scout and see what it does. I have more than \$25 wasted on blown up parts around here.

72

----- Original Message -----
From: "Rod Cerkoney" <n0rc@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, May 10, 2001 8:19 AM
Subject: RFI: 'Lil RASCAL' PSK-31 interface

> Folks;
>
> Anybody have direct experience with this device, found at:
>
> <http://www.packetradio.com/psk31.htm>
>
> Seems like a pretty good deal at \$25, for all parts needed, including
> cables and connectors, to build a nice isolating PSK interface for my
> 706.
>
> 73, Rod N0RC
> Ft Collins, CO
>
> *****
> SuperFest 2001 14-Jul-2001
> <http://www.qsl.net/n0rc/hamfest/hamfest.html>
> BE THERE!
> *****
>
>

Date: Thu, 10 May 2001 08:33:10 -0400
From: "George Osier" <gosier@twcnny.rr.com>
To: <qrp-l@lehigh.edu>
Subject: [97978] Milliwatt totals so far.....
Message-ID: <002f01c0d94d\$5f9ce1c0\$25191842@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello !!!!

At 83 worked

45 confirmed

Just got P40R , MJ0AWR in the mail yesterday
Both worked with 500 mw !!!!

Lots of cards still out

73s

George , N2JNZ / QRPP

Date: Thu, 10 May 2001 08:44:33 -0400
From: Chuck Ludinsky <cjl@mitre.org>
To: neqrp@jonal.net, qrp-l@lehigh.edu
Subject: [97979] NEQRP CW Net, Thursday, 3 May, 8:30 PM EDT, 3.561MHz (Note time change)
Message-ID: <3AFA8D31.FD0D0884@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The New England QRP Club's WQ1RP CW net meets again Thursday night, 10 May 2001, at 8:30 PM EDT (0030Z, 11 May 01) on or near 3.561 MHz. Net control operator for tonight's 80M session will be John, WB1HBE, operating from Chelmsford, MA. PLEASE NOTE THE CHANGE IN STARTING TIME from 9:00 PM EDT to 8:30 PM EDT. Note also, for those who prefer the later time, we will also be calling CQ on or around 9:00 PM.

Net control op for last week's session was Chuck, K1CL, operating from Chelmsford, MA. Conditions were excellent, with just about everyone running 599 or better. Congratulations to Joe, W2RBA, on his new house,

and welcome to Barry, N1EU, on his first-time check-in.

Participants in the net included:

W2RBA	Joe	Mt.Vision, NY	599
K1CWZ	Spi	Nashua, NH	589
W1CFI	Paul	Falmouth, MA	599
W2APF	Thaire	N.Easton, MA	599
AB8DF	Ed	Waterford, MI	359-469
W1FMR	Jim	Salem, NH	599
K1RC	John	Dracut, MA	599
K1LGQ	Dennis	Brookline, NH	599
N1EU	Barry	nr Albany, NY	599
W1PID	Jim	Sanbornton, NH	599
KA3WMJ	Ken	Erwinna, PA	599
AA1MY	Seab	Bethel, ME	599
K1CL	Chuck	Chelmsford, MA (net op)	

Thanks to all who joined the net last week; we look forward to hearing from you again tonight or during subsequent nets.

72 DE K1CL
Chuck.

Date: Thu, 10 May 2001 09:18:37 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <Dan.Tayloe@motorola.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97980] Re: NiMH batteries can be safely trickled charged!
Message-ID: <00af01c0d953\$e7a5f560\$4206d10a@endpoints.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Yes, the LM317 makes a great current regulator.

Feed power to the input, and put a SINGLE resistor between the sense and output legs. The LM317 works by keeping the output pin LIMITED to a SPECIFIC voltage above the sense leg. If you just have a single resistor then the current can climb until the voltage drop across the resistor equals that trigger voltage.

I forget the actual voltage, but it's in the spec sheets.

GREAT constant current regulator.

One thing... If you use this, you MUST have a diode to prevent backcurrent if the source voltage drops too low. Otherwise you can DISCHARGE your batteries back through the circuit.

Mike

Date: Thu, 10 May 2001 09:29:37 -0400
From: "Brian" <bmurrey@amexol.net>
To: <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97981] Re: NiMH batteries can be safely trickled charged!
Message-ID: <001901c0d955\$42e0cc10\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Mike,

Ian Purdie has a great website down in Australia, and this interesting power supply using the LM317T. I have all the parts to build this one, and now I just need a day off.

<http://www.electronics-tutorials.com/basics/power-supply-variable.htm>

72

----- Original Message -----
From: "Mike Yetsko" <myetsko@insydesw.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, May 10, 2001 9:18 AM
Subject: Re: NiMH batteries can be safely trickled charged!

> Yes, the LM317 makes a great current regulator.
>
> Feed power to the input, and put a SINGLE resistor between the
> sense and output legs. The LM317 works by keeping the output
> pin LIMITED to a SPECIFIC voltage above the sense leg. If
> you just have a single resistor then the current can climb until
> the voltage drop across the resistor equals that trigger voltage.

>
> I forget the actual voltage, but it's in the spec sheets.
>
> GREAT constant current regulator.
>
> One thing... If you use this, you MUST have a diode to prevent
> backcurrent if the source voltage drops too low. Otherwise you
> can DISCHARGE your batteries back through the circuit.
>
> Mike
>
>
>

Date: Thu, 10 May 2001 09:31:14 -0400
From: "Brian" <bmurrey@amexol.net>
To: <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-
l@Lehigh.EDU>
Subject: [97982] Re: NiMH batteries can be safely trickled charged!
Message-ID: <000501c0d955\$7d7b8b30\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

one more...

<http://www.fpqrp.com/pigg20/batchrg.htm>

Another regulated supply using the LM317, this one is by W8DIZ and is
featured on the Flying Pigs QRP Club website.

72

----- Original Message -----

From: "Mike Yetsko" <myetsko@insydesw.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, May 10, 2001 9:18 AM
Subject: Re: NiMH batteries can be safely trickled charged!

> Yes, the LM317 makes a great current regulator.
>
> Feed power to the input, and put a SINGLE resistor between the

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> pin LIMITED to a SPECIFIC voltage above the sense leg. If
> you just have a single resistor then the current can climb until
> the voltage drop across the resistor equals that trigger voltage.
>
> I forget the actual voltage, but it's in the spec sheets.
>
> GREAT constant current regulator.
>
> One thing... If you use this, you MUST have a diode to prevent
> backcurrent if the source voltage drops too low. Otherwise you
> can DISCHARGE your batteries back through the circuit.
>
> Mike
>
>
>

Date: Thu, 10 May 2001 09:58:48 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <bmurrey@amexol.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97983] Re: NiMH batteries can be safely trickled charged!
Message-ID: <010301c0d959\$dca82e20\$4206d10a@endpoints.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Neat sites...

BUT...

They all have one thing in common. They are using the LM317 as
a VOLTAGE regulator and then (in the FP case) just placing the
batteries ACROSS the voltage.

The discussion was about a CURRENT limiter, or actually a
FIXED CURRENT regulating device to charge NiMH. You
wouldn't want to just place NiMH into EITHER of those circuits.
You could have disastrous results, or at least poor performance
results.

Mike

Date: Thu, 10 May 2001 10:08:39 -0400
From: "Brian" <bmmurray@amexol.net>
To: "Mike Yetsko" <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [97984] Re: NiMH batteries can be safely trickled charged!
Message-ID: <000c01c0d95a\$b69ed340\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

OOPS!!

I should read more closely.

Sorry Mike.

----- Original Message -----

From: "Mike Yetsko" <myetsko@insydesw.com>
To: <bmmurray@amexol.net>; "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, May 10, 2001 9:58 AM
Subject: Re: NiMH batteries can be safely trickled charged!

> Neat sites...

>

> BUT...

>

> They all have one thing in common. They are using the LM317 as
> a VOLTAGE regulator and then (in the FP case) just placing the
> batteries ACROSS the voltage.

>

> The discussion was about a CURRENT limiter, or actually a
> FIXED CURRENT regulating device to charge NiMH. You
> wouldn't want to just place NiMH into EITHER of those circuits.
> You could have disastrous results, or at least poor performance
> results.

>

> Mike

>

>

>

>
>

Date: Thu, 10 May 2001 10:34:40 -0400
From: "Tom Pennebaker" <n4rs@netpath-rc.net>
To: <bmurrey@amexol.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97985] Re: 'Lil RASCAL' PSK-31 interface
Message-ID: <000901c0d95e\$5967c520\$102a1bce@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've built three of them. Work just fine. Didn't think I could go to town and gather up the parts, including my time, gas, etc and get all this for \$25.00..especially the PC board. The plastic enclosure is too small but with alittle ingenuity you can make it fit. Use it primarily for cw and alittle psk31. No plans for sstv at the moment. Particularly like QRQ keyboard cw . Made one for a Kenwood and two for Ten-Tec's. If you can't put this together you need to get your soldering iron, needle nose pliers, cutters, etc together and put them on E??? and concentrate on communicating or get someone to build it for you.....geezzzzz... look at all the fun you would miss out on!!...Tom N4RS

----- Original Message -----

From: "Brian" <bmurrey@amexol.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, May 10, 2001 8:29 AM
Subject: Re: 'Lil RASCAL' PSK-31 interface

> Looks like a SWEET deal. I'm going to get one for my Ten Tec Scout and see
> what it does. I have more than \$25 wasted on blown up parts around here.

>

> 72

>

> ----- Original Message -----

> From: "Rod Cerkoney" <n0rc@hotmail.com>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Thursday, May 10, 2001 8:19 AM
> Subject: RFI: 'Lil RASCAL' PSK-31 interface

>

>

> > Folks;

> >

> > Anybody have direct experience with this device, found at:
> >
> > <http://www.packetradio.com/psk31.htm>
> >
> > Seems like a pretty good deal at \$25, for all parts needed, including
> > cables and connectors, to build a nice isolating PSK interface for my
> > 706.
> >
> > 73, Rod N0RC
> > Ft Collins, CO
> >
> > *****
> > SuperFest 2001 14-Jul-2001
> > <http://www.qsl.net/n0rc/hamfest/hamfest.html>
> > BE THERE!
> > *****
> >
> >

Date: Thu, 10 May 2001 10:36:02 -0400
From: Pete Burbank <plburbank@kih.net>
To: K5BDZ@aol.com, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97986] Re: NorCal 20 VFO Problems
Message-ID: <5.0.2.1.0.20010510102444.00a9c020@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 07:38 AM 5/10/2001 -0400, K5BDZ@aol.com wrote:
>Am building a Norcal 20 kit (version 1.0) and the VFO is (has?) a problem...
>
>All voltages are correct, all components correct, no solder bridges, etc.
>
>The VFO did work for a very short time but was too low (4.965 MHz) so I
>spread turns of inductor, turned it back on and it won't work since. I have:
>1. Replaced J310 (don't think it was the problem though)
>SNIP.
>
>Bill K5BDZ

Bill,
Usually when this sort of failure occurs it is related to something that
you just did.
In this case perhaps varnish on a toroid connection, one of my bugaboos even
after umteen years of using toroids.
I liked your comments about the little RS solder sucker. Mine says

"Snortini" on the
side. Great for IC's.
GL es 73
Pete NV4V

Date: Thu, 10 May 2001 07:54:32 -0700
From: Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>
To: "'Mike Yetsko'" <myetsko@insydesw.com>
Cc: "QRPL (E-mail)" <qrp-l@lehigh.edu>
Subject: [97987] RE: NiMH batteries can be safely trickled charged!
Message-ID: <87568F78ABDCD211A0AC0008C707718B029D1293@az10exm03.sat.mot.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

You are right. Sense input, not ground input. Old age creeping up on me.....

Most solar panels already have a series diode to keep the battery from discharging into the panel if the output drops to much.

- Dan, N7VE

-----Original Message-----

>From: Mike Yetsko [mailto:myetsko@insydesw.com]
>Sent: Thursday, May 10, 2001 6:19 AM
>To: Dan.Tayloe; Low Power Amateur Radio Discussion
>Subject: Re: NiMH batteries can be safely trickled charged!
>
>Yes, the LM317 makes a great current regulator.
>
>Feed power to the input, and put a SINGLE resistor between the
>sense and output legs. The LM317 works by keeping the output
>pin LIMITED to a SPECIFIC voltage above the sense leg. If
>you just have a single resistor then the current can climb until
>the voltage drop across the resistor equals that trigger voltage.
>
>I forget the actual voltage, but it's in the spec sheets.
>
>GREAT constant current regulator.
>
>One thing... If you use this, you MUST have a diode to prevent
>backcurrent if the source voltage drops too low. Otherwise you
>can DISCHARGE your batteries back through the circuit.
>
>Mike

Date: Thu, 10 May 2001 15:01:42 +0100
From: "Larry Wise" <lewise@txwises.com>
To: "qrp" <qrp-1@lehigh.edu>
Subject: [97988] 2M collinear vert ant
Message-ID: <200105101501.KAA11247@aoot.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Gang:

Looking for info or reference on a particular antenna.

In the deep dark past, maybe the '70s, there was an antenna made of an odd number of 1/4 wave sections of coax, soldered together with center to braid and then terminated at the top some way, maybe a resistor, and fed at the bottom.

This was all mounted about a 1/4 wave off of a tower, and as I recall gave a cardioid like pattern with the null in the direction of the tower.

Does anyone remember/know of an antenna remotely like this discription?

Do you have a reference per chance?

thanks,

Larry KA5T
Georgetown, Texas

Date: Thu, 10 May 2001 11:25:33 -0400
From: "Stephen M. King" <frastephen@home.com>
To: <n4rs@netpath-rc.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97989] Re: 'Lil RASCAL' PSK-31 interface
Message-ID: <04ae01c0d965\$74dc68e0\$eb600c18@burl11.nj.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

From: "Tom Pennebaker" <n4rs@netpath-rc.net>

> The plastic enclosure is too small but with a little ingenuity you can make it fit.

Right, you need to drill two small holes in the PC board to get it to fit in the case, but once you do that the poles in the case support the pc board nicely. Two cable ties suport the cables (one on each side of the case -- one inside and one outside) and the PTT LED is visible through a red lens on the front of the case.

Drill the holes BEFORE you build the kit. I figured this out AFTER I built the kit and it was a little scary drilling a board that was populated and had cables attached to it! :-)

73,
Stephen
W3SMK

Date: Thu, 10 May 2001 08:41:58 -0700 (PDT)
From: agtaylor@llnl.gov
To: qrp-l@lehigh.edu
Subject: [97990] NorCal toroids arrive
Message-ID: <200105101543.IAA19693@poptop.llnl.gov>
MIME-Version: 1.0
Content-Type: TEXT/plain; CHARSET=US-ASCII

Finally, we get something out here before our east coast brethren...
the NorCal Toroid kit arrived yesterday in 'much cooler' Pleasanton CA.
Thanks to the NorCal gang for another great kit!

Now to go build something...

K7GT

--

Allan G Taylor

agtaylor@llnl.gov

Date: Thu, 10 May 2001 11:41:40 -0400
From: "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97991] RE: NiMH batteries can be safely trickled charged!
Message-ID: <078F21595FA7D411B87B00805FA728E64A472A@atlexc02ntms.h boc.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

A construction note:

I just looked over the spec sheets for the LM317. DIZ has an error on his diagram.. The manufacturer recommends using a 1MF tantalum cap on the output. The reason being the low ESR (equivalent series resistance) of the cap. The regulator will oscillate if the output does not have this effective AC short to ground. The regular aluminum electrolytics can have a quite high ESR, compared to tantalums, and cause problems.

Also a trick I learned about 40 years ago is to use a 10-15 MFD cap from the sense line to ground. This can be used in your own regulator using Darlington or regular power transistors. What happens is the transistors effectively multiply the capacity and you get clean output from the regulator. In actuality, what you are doing is reducing the effective ripple of the power supply voltage applied to the controlling element, the base of the regulator transistor or sense lead and giving a clean output. Works great and lasts a long time.

Jerry
W3CDE

-----Original Message-----

From: Tayloe Dan-P26412 [mailto:Dan.Tayloe@motorola.com]
Sent: Thursday, May 10, 2001 7:55 AM
To: Low Power Amateur Radio Discussion
Subject: RE: NiMH batteries can be safely trickled charged!

You are right. Sense input, not ground input. Old age creeping up on me.....

Most solar panels already have a series diode to keep the battery from discharging into the panel if the output drops to much.

- Dan, N7VE

-----Original Message-----

>From: Mike Yetsko [mailto:myetsko@insydesw.com]

>Sent: Thursday, May 10, 2001 6:19 AM
>To: Dan.Tayloe; Low Power Amateur Radio Discussion
>Subject: Re: NiMH batteries can be safely trickled charged!
>
>Yes, the LM317 makes a great current regulator.
>
>Feed power to the input, and put a SINGLE resistor between the
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>the voltage drop across the resistor equals that trigger voltage.
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>I forget the actual voltage, but it's in the spec sheets.
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>GREAT constant current regulator.
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>One thing... If you use this, you MUST have a diode to prevent
>backcurrent if the source voltage drops too low. Otherwise you
>can DISCHARGE your batteries back through the circuit.
>
>Mike

Date: Thu, 10 May 2001 16:47:46 +0100
From: Brendan Minish <EI6IZ@oceanfree.net>
To: lewise@txwises.com, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [97992] Re: 2M collinear vert ant
Message-ID: <5.1.0.14.2.20010510164442.0276d9d0@mail.oceanfree.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 15:01 10/05/2001 +0100, Larry Wise wrote:

>Gang:
>In the deep dark past, maybe the '70s, there was an antenna
>made of an odd number of 1/4 wave sections of coax, soldered
>together with center to braid and then terminated at the top
>some way, maybe a resistor, and fed at the bottom.

have a look at
<http://www.repeater-builder.com/rbtip/wa6svt.html>
is this what you are looking for?

Almost any antenna mounted on the side of a tower will have a null in the direction of the tower if it's mounted within a couple of wavelengths of the tower.

--

Brendan Minish EI6IZ

ei6iz@oceanfree.net
PGP key available from key servers [wwwkeys.pgp.net](http://www.keys.pgp.net)

Date: Thu, 10 May 2001 10:44:52 -0500
From: "Ed Manuel (N5EM)" <n5em@flash.net>
To: qrp-1@lehigh.edu
Subject: [97993] Fwd: Re: 'Lil RASCAL' PSK-31 interface
Message-ID: <4.3.2.7.2.20010510104411.00beaa20@pop.flash.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Thought Howard would like this especially.

Ed

>Date: Thu, 10 May 2001 10:34:40 -0400
>Reply-To: n4rs@netpath-rc.net
>Sender: owner-qrp-1@Lehigh.EDU
>From: "Tom Pennebaker" <n4rs@netpath-rc.net>
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Re: 'Lil RASCAL' PSK-31 interface
>X-To: <bmurrey@amexol.net>, "Low Power Amateur Radio Discussion"
><qrp-1@Lehigh.EDU>
>X-Mailer: Microsoft Outlook Express 5.00.3018.1300
>X-Orcpt: rfc822;qrp-1@listserv.cc.lehigh.edu
>
>I've built three of them. Work just fine. Didn't think I could go to town
>and gather up the parts, including my time, gas, etc and get all this for
>\$25.00..especially the PC board. The plastic enclosure is too small but with
>a little ingenuity you can make it fit. Use it primarily for cw and a little
>psk31. No plans for sstv at the moment. Particularly like QRQ keyboard cw .
>Made one for a Kenwood and two for Ten-Tec's. If you can't put this together
>you need to get your soldering iron, needle nose pliers, cutters, etc
>together and put them on E??? and concentrate on communicating or get
>someone to build it for you.....geezzzzz... look at all the fun you would
>miss out on!!!...Tom N4RS
>----- Original Message -----
>From: "Brian" <bmurrey@amexol.net>
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Sent: Thursday, May 10, 2001 8:29 AM
>Subject: Re: 'Lil RASCAL' PSK-31 interface
>
>

> > Looks like a SWEET deal. I'm going to get one for my Ten Tec Scout and
> see
> > what it does. I have more than \$25 wasted on blown up parts around here.
> >
> > 72
> >
> > ----- Original Message -----
> > From: "Rod Cercone" <n0rc@hotmail.com>
> > To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> > Sent: Thursday, May 10, 2001 8:19 AM
> > Subject: RFI: 'Lil RASCAL' PSK-31 interface
> >
> >
> > > Folks;
> > >
> > > Anybody have direct experience with this device, found at:
> > >
> > > <http://www.packetradio.com/psk31.htm>
> > >
> > > Seems like a pretty good deal at \$25, for all parts needed, including
> > > cables and connectors, to build a nice isolating PSK interface for my
> > > 706.
> > >
> > > 73, Rod N0RC
> > > Ft Collins, CO
> > >
> > > *****
> > > SuperFest 2001 14-Jul-2001
> > > <http://www.qsl.net/n0rc/hamfest/hamfest.html>
> > > BE THERE!
> > > *****
> > >
> > >

Date: Thu, 10 May 2001 16:30:37
From: "laura halliday" <marshal42@hotmail.com>
To: qrp-1@lehigh.edu
Subject: [97994] RE: WPM and dit duration
Message-ID: <F63ypKsEgJX0xJagXTi000029a7@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Nick WA5BDU wrote:

>hm .. I thought the Fourier transform did (does) give

>the amplitude of each frequency component...

Only under certain conditions. If the signal is periodic (like Chuck's stream of dits), the Fourier Transform exists and will tell you everything you need to know.

Such signals aren't particularly interesting, because they carry no information. Worse, the equations are too simple. :-)

Signals that carry information are random, and the Fourier Transform of such signals doesn't exist. The power spectral density, however, *does* exist, and you can work it out if you want to.

>... (snip)
>But I was (and remain) afraid to take Chuck's challenge.
>Too complex. I guess the square wave is a "perfect"
>square, but it's just the envelope, right? And does
>it make a difference if it switches the RF off and on
>at zero crossings or ...? Probably does. Maybe best
>handled with a string of dits and a spectrum analyzer.

It doesn't get much simpler. Model it as two signals: a continuous carrier and the modulation. Since they are multiplied in the time domain, you will need to convolve their spectra in the frequency domain. Since the continuous carrier has a particularly simple spectrum, the convolution itself is simple too. The result is the baseband spectrum of the modulation, shifted over to the frequency of the carrier. Kid's stuff.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Date: Thu, 10 May 2001 13:33:26 -0400
From: "Russ Hines" <wb8zcc@one.net>
To: <agtaylor@llnl.gov>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97995] Re: NorCal toroids arrive
Message-ID: <004b01c0d977\$54efa120\$9d2717d8@rbhines>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8BIT

Not quite the east coast, but the NorCal toroid kit arrived here in SW Ohio at noon today.

Thanks, Doug, Jim, and the rest of the NorCal group.

73,
Russ Hines
WB8ZCC
wb8zcc@one.net
wb8zcc@arrl.net

----- Original Message -----

From: <agtaylor@llnl.gov>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Thursday, May 10, 2001 11:41 AM
Subject: NorCal toroids arrive

> Finally, we get something out here before our east coast brethren...
> the NorCal Toroid kit arrived yesterday in 'much cooler' Pleasanton CA.
> Thanks to the NorCal gang for another great kit!
>
> Now to go build something...
>
> K7GT
>
> --
>
> Allan G Taylor
>
> agtaylor@llnl.gov
>
>

Date: Thu, 10 May 2001 10:55:37 -0700
From: Russ Carpenter <russ@natworld.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [97996] Results of the MAY SPARTAN SPRINT
Message-ID: <B7202429.8131%russ@natworld.com>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"

Content-transfer-encoding: 7bit

The May, 2001 Spartan Sprint was one of those fascinating exercises in radio propagation, with great conditions in the mid America and a not-so-good environment in the Golden State. The winner of the Tubby Division, WA9TZE, reported a remarkable 96 Q's for two hours of operating. That's cookin!

One of these days a Sprinter is going to break the 100 mark. It could be you!

Each contact received one point. If you didn't tell us the weight of your station, or if your station weighed more than a full grown wildebeast, we assigned a weight of 30 pounds.

The soapbox makes great reading and has been published separately in the May edition of The ARS Sojourner, which went live today. Don't miss it!
<http://www.natworld.com/ars>

THE SKINNY DIVISION (results sorted in the order of points per pound)

Call	Name	80m	40m	20m	15m	10m	Total Points	Wt.	Points/ Pound
N7RVD	Brian	0	0	23	0	0	23	.22	104.55
K0EVZ	Doc	0	0	49	0	0	49	1.1	44.55
KC4TXR	John	0	0	26	0	0	26	.8	32.50
N7SR	Steve	0	22	27	0	0	49	1.7	28.82
AA4XX	Paul	0	0	15	0	0	15	.6	25.00
N7CEE	Bruce	0	10	18	0	0	28	2.2	12.73
N2CQ	Ken	0	17	32	0	0	49	6	8.17
W0CH	David	0	11	15	0	0	26	3.5	7.43
W5TB	Doc	0	7	15	0	0	22	3	7.33
N4HAY	Dick	0	25	0	0	0	25	4	6.25
K04WX	Mike	0	0	7	0	0	7	1.3	5.38
N0SXX	Gary	0	20	20	0	0	40	8	5.00
AC7CF	Andrew	0	8	11	0	0	19	4	4.75
K0BFT	Jim	0	5	13	0	0	18	4	4.50
W1PID	Jim	0	4	6	0	0	10	2.5	4.00
K4MF	Gary	0	0	18	0	0	18	4.5	4.00
KI0II	Ron	0	9	13	0	0	22	6.1	3.61
WA9TZE	Jim	22	41	33	0	0	96	30	3.20
AE6N	Jim	0	0	6	0	0	6	2	3.00
WD7Y	Ed	0	11	10	0	0	21	7	3.00
KB9LCK	Chris	0	2	9	0	0	11	4	2.75
N9AW	Jerry	3	36	32	0	0	71	30	2.37
W0UFO	Mert	0	0	14	0	0	14	6	2.33
AA7QU	Russ	0	28	34	0	0	62	30	2.07
KW4JS	John	2	5	9	0	0	16	8	2.00

NB0W	Scott	0	0	6	0	0	6	3.5	1.71
W0PWE	Jerry	2	21	27	0	0	50	30	1.67
K4BX	Bill	0	4	12	0	0	16	10	1.60
N7NLN	George	0	1	8	0	0	9	6.1	1.48
W9FNB	Gary	0	11	5	0	0	16	11	1.45
KD5LX	Bob	0	7	6	0	0	13	12	1.08
NC90	Skip	1	4	1	0	0	6	6	1.00
N7AC	Tom	0	14	13	0	0	27	30	0.90
KG8GW	Ron	3	16	6	0	0	25	30	0.83
N7MQ	Mark	0	8	15	0	0	23	30	0.77
K07X	Alan	0	13	10	0	0	23	30	0.77
AL7FS	Jim	0	0	23	0	0	23	30	0.77
K4GT	Jim	0	0	19	0	0	19	30	0.63
K8KFJ	Garie	1	13	5	0	0	19	30	0.63
K7PX	Steve	0	1	1	0	0	2	3.75	0.53
AC5K	Wes	0	0	16	0	0	16	30	0.53
WB6HQK	Bart	0	7	4	0	0	11	30	0.37
K04PY	Brent	1	8	0	0	0	9	30	0.30
KE1L	Mark	0	3	4	0	0	7	30	0.23
N5EYX	Roy	0	5	0	0	0	5	30	0.17
WF6D	Bill	0	2	3	0	0	5	30	0.17
VE6QSL	John	0	0	5	0	0	5	30	0.17
W6ZIP	John	0	2	1	0	0	3	30	0.10
WD0DDU	Layne	0	0	3	0	0	3	30	0.10
W6ZIP	John	0	2	1	0	0	3	30	0.10
K6PZB	John	0	0	1	1	0	2	30	0.07

THE TUBBY DIVISION (results sorted in the order of points)

Call	Name	80m	40m	20m	15m	10m	Total Points
WA9TZE	Jim	22	41	33	0	0	96
N9AW	Jerry	3	36	32	0	0	71
AA7QU	Russ	0	28	34	0	0	62
W0PWE	Jerry	2	21	27	0	0	50
N2CQ	Ken	0	17	32	0	0	49
K0EVZ	Doc	0	0	49	0	0	49
N7SR	Steve	0	22	27	0	0	49
N0SXX	Gary	0	20	20	0	0	40
N7CEE	Bruce	0	10	18	0	0	28
N7AC	Tom	0	14	13	0	0	27
W0CH	David	0	11	15	0	0	26
KC4TXR	John	0	0	26	0	0	26
KG8GW	Ron	3	16	6	0	0	25
N4HAY	Dick	0	25	0	0	0	25
N7MQ	Mark	0	8	15	0	0	23
N7RVD	Brian	0	0	23	0	0	23

K07X	Alan	0	13	10	0	0	23
AL7FS	Jim	0	0	23	0	0	23
KI0II	Ron	0	9	13	0	0	22
W5TB	Doc	0	7	15	0	0	22
WD7Y	Ed	0	11	10	0	0	21
K4GT	Jim	0	0	19	0	0	19
AC7CF	Andrew	0	8	11	0	0	19
K8KFJ	Garie	1	13	5	0	0	19
K4MF	Gary	0	0	18	0	0	18
K0BFT	Jim	0	5	13	0	0	18
KW4JS	John	2	5	9	0	0	16
K4BX	Bill	0	4	12	0	0	16
W9FNB	Gary	0	11	5	0	0	16
AC5K	Wes	0	0	16	0	0	16
AA4XX	Paul	0	0	15	0	0	15
W0UFO	Mert	0	0	14	0	0	14
KD5LX	Bob	0	7	6	0	0	13
WB6HQQ	Bart	0	7	4	0	0	11
KB9LCK	Chris	0	2	9	0	0	11
W1PID	Jim	0	4	6	0	0	10
K04PY	Brent	1	8	0	0	0	9
N7NLN	George	0	1	8	0	0	9
KE1L	Mark	0	3	4	0	0	7
K04WX	Mike	0	0	7	0	0	7
NC90	Skip	1	4	1	0	0	6
NB0W	Scott	0	0	6	0	0	6
AE6N	Jim	0	0	6	0	0	6
N5EYX	Roy	0	5	0	0	0	5
WF6D	Bill	0	2	3	0	0	5
VE6QSL	John	0	0	5	0	0	5
W6ZIP	John	0	2	1	0	0	3
WD0DDU	Layne	0	0	3	0	0	3
W6ZIP	John	0	2	1	0	0	3
K7PX	Steve	0	1	1	0	0	2
K6PZB	John	0	0	1	1	0	2

Thanks for supporting The Adventure Radio Society!

Russ Carpenter, AA7QU
Contest Manager

Date: Thu, 10 May 2001 18:37:40 -0000
From: "Delbert Long" <ad6we@hotmail.com>

To: qrp-1@Lehigh.EDU
Subject: [97997] crystals
Message-ID: <F2348vjqueolj8Jecd900002ac9@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I am interested in several projects needing crystals...particularly the universal vxo described on G3RJV's page:
<http://www.g3ycc.karoo.net/week1.html>

Where is a source for 10, 15, 20, 30 meter crystals?

There is a local company who can produce custom crystals, but they wanted to know stuff like load capacitance, calibration tolerance, yadda yadda yadda....

Delbert Long, AD6WE
2111 Cheyenne Way Unit 9
Fullerton, CA 92833-4912
Grid Square DM13aw

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Thu, 10 May 2001 14:57:52 -0400
From: preacher102677@juno.com
To: qrp-1@Lehigh.EDU
Subject: [97998] I just don't get it...
Message-ID: <20010510.150211.-151701.4.preacher102677@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Ok,
I've built an MS-15 ala Steve Weber right.... Everything seems to work ok, BUT...
Every time I transmit, I get a high pitched screetchy noise along with my side tone when I transmit power is above three watts. When I move my hand near the Txcvr, The noise is dimished, but so is the power, down to about half a watt. What's the deal pickle?
why it do that?

LIC,
G. Brandon Hoyt --"Known far and Wide as the Great Pumpkin."
Photographer, Philosopher, Preacher, Pirate, Poet.

DE KG4GVL Clear.

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<http://dl.www.juno.com/get/tagj>.

Date: Thu, 10 May 2001 13:01:36 -0600 (MDT)

From: "Paul Harden, NA5N" <na5n@rt66.com>

To: qrp-1@lehigh.edu

Subject: [97999] This Fourier Transform stuff

Message-ID: <Pine.SUN.4.10.10105101218480.25778-1000000@shell.rt66.com>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

This discussion on the merits of fourier analysis is interesting, but obviously one of those things few people have had reason to encounter. I will attempt a brief, simple explanation for those just wondering what the heck it is - at the expense of total accuracy. I'm no expert with fourier transforms, but work with it daily -- after all, it *is* the basis upon which radio astronomy works.

It's all based on power density within a given bandwidth, such as the bandwidth of an IF amplifier or filter. You have the signal of interest in there, but you also have power due to other signals and noise. If you put a simple power meter on it, it will tell you the TOTAL power within the bandwidth (such as an S-meter or DVM on the audio output), but it does NOT tell you how much power is attributed to each incremental frequency, say in 1Hz steps.

This CAN be done by some tricky mathematical derivations. It basically converts amplitude information into spectral information. And since it is a mathematical process, it can easily be translated into a hardware machine. Thus, you squirt the signals in, and get a spectral plot output, with a fast fourier transform (FFT) number cruncher in between.

This process DOES depend on a regular, periodic signal buried in the noisy signal somewhere, as Laura and others pointed out. Random signals do not auto-correlate well in this process, and thus scarcely detected.

So what the heck do you use this slick FFT gizmo for?

In radio astronomy (like here at the VLA), it is paramount in detecting the powers that astronomers use for doing their physics. Say we are

observing some distant, very weak radio star. If you look at the signals coming in from the antennas, all you see is a bunch of random noise. You integrate this noise for some period of time, say 1-10 seconds, then run it through the FFT machine, and the output will show how much power is attributed to each slice of frequency within the input bandwidth. In our case, this will show one of two things:

- 1) A specific frequency within the bandwidth suddenly emerges as having more power than the other stuff (noise). We call this the "spectral line." It is then translated back to the receiver to figure out exactly what input RF frequency the spectral line is at. In our case, this will usually be the spectral line for some chemical element, usually hydrogen. It will be in the (about) 1200-1400 MHz region, depending on the doppler shift caused by how fast the object is moving away from the earth (called RED SHIFT in astronomical terms). Thus, from this FFT output information, it tells us what chemical elements are present in the object we are observing, what it's absolute velocity is, and what the temperature is, in degrees K, of the SOURCE. (I.e., how hot the source is at each frequency). This is because the FFT **does** provide you with accurate amplitude information **if** the signal is periodic. When you hear on the news that a new quasar was detected 8 million light years away moving at 0.7 times the speed of light and is 30,000 degrees hot ... it was all determined by the FFT!
- 2) If no spectral lines are present, then the output represents the average temperature of the source at that frequency. This is called "continuum power," (vs. spectral line power). Often we will observe an object at two different frequencies, say around 1.2GHz and 8GHz, run both frequencies through the FFT to determine the SOURCE temperature of each, which will be different. You plot the absolute temperatures (power) at different frequencies and will make a slope. The direction of the slope will tell you if the power from the source is thermal power (generated by burning gasses), or non-thermal power (power generated by strong magnetic fields, for example) ... and the magnitude of the slope tells you what the black body radiation constant is.

If a non-periodic signal comes in from the VLA antennas, such as modulation from a %\$@#& cell phone, the power will be distributed over a wider bandwidth and will strike each VLA antenna at a different time, so it won't integrate very well (but will auto-correlate well). This allows us to tell which signals are coming from space, and which signals are terrestrial generated ... which in our case is always considered interference and we try to remove it. The FFT does much of the removal automatically.

BTW ... this is one reason why the huge radio telescopes are almost worthless for detecting SETI signals. If alien signals were being received, which likely would be some form of modulation or random sequences of bursts (like the prime numbers in the movie "Contact,") well the FFT just kinda ignores them, because it takes a constant,

periodic signal to be correlated into spectral information. Sorry!

Slick stuff. A slick way to detect signals that are actually below the noise level. Not sure what application it would have to good old QRP HF communications (the result vs. the effort) -- although having said that, FFT's is the basis of DSP filtering. Cheaper to just get a canned DSP filter :-) A full-function FFT machine with floating point processor is several years pay for most of us -hi.

72, Paul NA5N

PS - Although Chuck's initial question **is** a very good one and applicable. The faster the code speed, the higher the random distribution of power, and thus the more bandwidth consumed/required.

Date: Thu, 10 May 2001 14:07:58 -0500
From: "Jerry L. Bartachek" <jsbarta@lisco.com>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [98000] OT: SGC "Secret" in Ad
Message-ID: <3AFAE70E.7AA6D256@lisco.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

Back in the March QST magazine, I saw SGC's advertisement on page 138, which was surrounded by a border of dits and dahs. I decided to write down what they had printed in "visual" CW. It is a sorta "secret" message, but no so clandestine for us hard core CW buffs.

I was surprised that no one posted to the QRP-L or QTH/NET CW list about it!

I am curious if any QRP hams read and responded to the message as directed. You should reply directly to me and not post on this list to preserve bandwidth.

Has anyone heard back from SGC after responding to the "secret" message?

72,
Jerry L. Bartachek KD CA
Washington, IA

Date: Thu, 10 May 2001 15:15:07 -0400
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "'na5n@rt66.com'" <na5n@rt66.com>, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [98001] RE: This Fourier Transform stuff
Message-ID: <125490A005E3D3118C9C00805FC743CC023B2D58@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Thanks, Paul,

Some additional info about this, and some cool links, are found at:

<http://www.arrl.org/tis/info/dsp.html>

73,
Ed Hare, W1RFI

> -----Original Message-----

> From: Paul Harden, NA5N [mailto:na5n@rt66.com]

> Sent: Thursday, May 10, 2001 3:02 PM

> To: Low Power Amateur Radio Discussion

> Subject: This Fourier Transform stuff

>

>

> Gang,

> This discussion on the merits of fourier analysis is interesting, but

> obviously one of those things few people have had reason to encounter.

> I will attempt a brief, simple explanation for those just

> wondering what

> the heck it is - at the expense of total accuracy. I'm no expert with

> fourier transforms, but work with it daily -- after all, it *is* the

> basis upon which radio astronomy works.

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> bandwidth of an IF amplifier or filter. You have the signal

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> So what the heck do you use this slick FFT gizmo for?
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>

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>
> 72, Paul NA5N
>
> PS - Although Chuck's initial question *is* a very good one and
> applicable. The faster the code speed, the higher the random
> distribution
> of power, and thus the more bandwidth consumed/required.
>

Date: Thu, 10 May 2001 15:27:35 -0400 (EDT)
From: George Gingell <k3tks@u1.abs.net>
To: "david.g3ryp" <david.g3ryp@ntlworld.com>
Cc: QRP Group <qgrp@yahooogroups.com>, QRP List <qrp-l@Lehigh.EDU>
Subject: [98002] Re: [GQRP] RF Filters and things
Message-ID: <Pine.BSF.4.33.0105101458570.43066-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi David,

I found your posting particularly interesting. First, let me say that you are off to a good start with the Wes Hayward and Doug Demaw Books.

Back in the 70's Doug DeMaw, Then W1CER, Later W1FB did a Article in QST on making what he Called MXM's, "Miniature Component Modules".

I made several of them. A circuit Design was constructed on a Dip Header and this would plug into a Dip Socket on the PCB. I made up some Breadboards With Wooden Moulding Frames and Installed numerous Wire Wrap Sockets. Actually The BreadBoards were Commercial Designs for Wire Wrap Sockets. I had a friend at a local Surplus Store who bought a large Quantity of them.

I also found that the little 2 X 2 Pref Board PCB's from Radio Shack (Tandy) were also useful for making small Modules. A VFO, An Audio Amp., A Crystal Osc., An Antenna Change over Relay Board, a Power Supply Board, etc.

International Crystal, used to have Little Modules called OX Osc. Modules. I have a whole set of them in a box somewhere. I had one for every band with a QRP Frequency Crystal in it. I think they also had a Mixer and a

RF Amp Module also.

Did you know that Ten-Tec Started out with Modules? The MR-1 Was sold as a Kit, or individual Modules. I have a set of them on Loan to WA8MCQ for some testing. :^}

So, the Idea is not really new or crazy, It is just time for it to become popular again. Good ideas have a way of returning from time to time.

It should fit in nicely with the "Manhattan Style" of PCB Construction which is popular today. (Gluing Little PCB Pads onto a piece of PCB Motherboard, Groundplane).

I have also used the "Cutting Wheel Salvage Technique" to Slice out Sections from a Circuit board for later use in a project. Audio Amplifier from an busted portable radio, Power supply and Oscillators from Computer Boards. IF Sections and Filters from OLD VHF Radios. Oh Heck, there are limitless possiabilities. This is especially good if you are in a hurry to save part of a PCB. Also some Circuits work better on the pcb enviroment. Also some parts lose their identity when taken out of the circuit.

Your answer to What is "72" ? is below my Signature Line.

Sir George, The First :^}

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and Board of Director Member.
Gingell & Company, Ltd. Small Business Telephone Systems
Notary Public and Commercial Locksmith Services (301) 572-6789 Office & Fax
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

Date: Thu, 10 May 2001 15:44:05 -0400
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "'ad6we@hotmail.com'" <ad6we@hotmail.com>, Low Power Amateur Radio Discussion
<qrp-1@Lehigh.EDU>

Subject: [98003] RE: crystals
Message-ID: <125490A005E3D3118C9C00805FC743CC023B2D59@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

> Where is a source for 10, 15, 20, 30 meter crystals?

If you go to:

<http://www.arrl.org/tis/tisfind.html>

and use the keywords CRYSTAL MANUFACTURER, you will get a whole list of suppliers.

> There is a local company who can produce custom crystals, but
> they wanted to
> know stuff like load capacitance, calibration tolerance, yadda yadda
> yadda....

Those things can be pretty important if you want to have your xtal operate on the specific frequency you order. If the exact frequency isn't critical to you, you can usually do okay by specifying a 30 pF load capacitance. Some of the custom manufacturers can work with a FAXed schematic of the circuit.

73,
Ed Hare, W1RFI

> -----Original Message-----
> From: Delbert Long [mailto:ad6we@hotmail.com]
> Sent: Thursday, May 10, 2001 2:38 PM
> To: Low Power Amateur Radio Discussion
> Subject: crystals
>
>
> I am interested in several projects needing
> crystals...particularly the
> universal vxo described on G3RJV's page:
> <http://www.g3ycc.karoo.net/week1.html>
>
> Where is a source for 10, 15, 20, 30 meter crystals?
>
> There is a local company who can produce custom crystals, but
> they wanted to
> know stuff like load capacitance, calibration tolerance, yadda yadda
> yadda....

>
> Delbert Long, AD6WE
> 2111 Cheyenne Way Unit 9
> Fullerton, CA 92833-4912
> Grid Square DM13aw
>
>

> Get your FREE download of MSN Explorer at <http://explorer.msn.com>
>

Date: Thu, 10 May 2001 11:36:25 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <lewise@txwises.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [98004] Re: 2M collinear vert ant
Message-ID: <016001c0d966\$fd39f760\$4206d10a@endpoints.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This antenna is in a NUMBER of books and online references.

But I recall it was one of the featured antennas in the ARRL book
titled "FM and Repeaters"

Mike

> Gang:
>
> Looking for info or reference on a particular antenna.
>
> In the deep dark past, maybe the '70s, there was an antenna
> made of an odd number of 1/4 wave sections of coax, soldered
> together with center to braid and then terminated at the top
> some way, maybe a resistor, and fed at the bottom.
>
> This was all mounted about a 1/4 wave off of a tower, and as
> I recall gave a cardioid like pattern with the null in the
> direction of the tower.
>
> Does anyone remember/know of an antenna remotely like this
> discription?
>
> Do you have a reference per chance?

>
> thanks,
>
> Larry KA5T
> Georgetown, Texas

Date: Thu, 10 May 2001 21:01:19 +0100
From: "Mark Paley" <mpaley@wcnet.org>
To: "Low Power Radio Group" <qrp-l@lehigh.edu>
Subject: [98005] more keys
Message-ID: <PGEPLCEGJDMJPHIGJMDGCEHFCKAA.mpaley@wcnet.org>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

For anyone interested I have some gifs of three more keys made by WB9LPU, Richard Meiss. They appear at the bottom of my web page. As I said before he will be at the Dayton Hamvention and I'm sure he will be able to answer any questions. And as I also stated, I have no financial interest in his business--just a very satisfied customer!

73 de
Mark Paley--KF8KL--
K1 #117, K2 #250 QRP-L #1899
<http://wcnet.org/~mpaley>

Date: Thu, 10 May 2001 16:53:16 -0400
From: Bruce Muscolino <w6toy@erols.com>
To: preacher102677@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [98006] Re: I just don't get it...
Message-ID: <3AFAFFBC.B0380524@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Brandon,

Then everything is not ail right, unless you define screeching as OK. I don't know anything about the MS15 so you can trash this right now, but I would say you have a case of RF feedback somewhere. Look carefully at your grounds. Are you using a ground on your antenna? Check the simple stuff first before you look for a complex answer!

73

Date: Thu, 10 May 2001 14:08:00 -0700
From: Mike Gipe <mgipe@reliablemeters.com>
To: "QRP-L list (E-mail)" <qrp-l@Lehigh.edu>
Subject: [98007] NorCal pizza pizza
Message-ID: <F988E2FF74F4D111A61F00A0C949D7A964B589@mission>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

Don't forget...

NorCal pizza gathering at the Round Table on El Camino Real in Mountain View, just north of highway 85, at 6:30 PM (that's 0230 UTC)

cu there!

Mike K1MG

Date: Thu, 10 May 2001 17:21:28 -0400 (EDT)
From: "John L. Sielke" <w2agn@pobox.com>
To: qrp-l@lehigh.edu
Subject: [98008] QRP DX
Message-ID: <XFMail.010510172128.w2agn@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

Has anyone been able to work 3B6RF with QRP? I tried on 18.070 with 5W, then 25W, then 50W. Finally at 100W, with a couple of repeats of my call, I got the customary
599!

On the other hand, last night I turned the bedroom rig (Argo II) on about 11PM,

and
heard J5X, working a pileup on 10.105. Half-heartedly gave a call, and bingo, got
him
first time. Surprised me so much I could hardly come back!

Guess we got spoiled with the ops at D68C and 3G0Y.

John W2AGN

Date: Thu, 10 May 2001 22:32:04 +0100
From: "Graham Firth" <graham@g3mfj.fsnet.co.uk>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [98009] I need to contact Seab Lyon - off topic - sorry!
Message-ID: <00bb01c0d998\$a8f72740\$02010080@graham>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi
Seab - if you are out there in hyperspace, can you send me a mail - I need
to discuss something with you.
graham@g3mfj.fsnet.co.uk
The e-mail address I have for you bounces.

Sorry to everyone else for the bandwidth!

72/3
Graham
G3MFJ

Date: Thu, 10 May 2001 17:37:22 -0400
From: "Mark Fancher" <mmfancher@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [98010] Re: This Fourier Transform stuff
Message-ID: <001001c0d999\$67fafea0\$6c2c56d1@GEARemote>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Fourier Transforms are used for engineering analysis, also. Particularly in vibration analysis. To be succinct, as my vibe professor was fond of saying, its just the conversion from the time domain into the frequency domain. So, if you are taking a bunch of amplitude measurements vs time (plot an amplitude value on the y axis and the time on the x axis), to make it amplitude (y-axis) vs frequency (x-axis), use our good friend Fourier.

Its very computationally intensive and well suited for a computer, but surprisingly, a simple formula. You can find it in any differential equations textbook.

BTW, this is the same process (albeit automatically) the ARRL goes through to determine the spectral purity for their product reviews . . .

Mark, W09G

----- Original Message -----

From: "Paul Harden, NA5N" <na5n@rt66.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Thursday, May 10, 2001 3:01 PM

Subject: This Fourier Transform stuff

> Gang,

> This discussion on the merits of fourier analysis is interesting, but
> obviously one of those things few people have had reason to encounter.
> I will attempt a brief, simple explanation for those just wondering what
> the heck it is - at the expense of total accuracy. I'm no expert with
> fourier transforms, but work with it daily -- after all, it *is* the
> basis upon which radio astronomy works.

>

> It's all based on power density within a given bandwidth, such as the
> bandwidth of an IF amplifier or filter. You have the signal of interest
> in there, but you also have power due to other signals and noise. If
> you put a simple power meter on it, it will tell you the TOTAL power
> within the bandwidth (such as an S-meter or DVM on the audio output), but
> it does NOT tell you how much power is attributed to each incremental
> frequency, say in 1Hz steps.

>

> This CAN be done by some tricky mathematical derivations. It basically
> converts amplitude information into spectral information. And since it is
> a mathematical process, it can easily be translated into a hardware
> machine. Thus, you squirt the signals in, and get a spectral plot output,
> with a fast fourier transform (FFT) number cruncher in between.

>

> This process DOES depend on a regular, periodic signal buried in the noisy
> signal somewhere, as Laura and others pointed out. Random signals do not
> auto-correlate well in this process, and thus scarcely detected.

>

> So what the heck do you use this slick FFT gizmo for?

>

> In radio astronomy (like here at the VLA), it is paramount in detecting
> the powers that astronomers use for doing their physics. Say we are
> observing some distant, very weak radio star. If you look at the signals
> coming in from the antennas, all you see is a bunch of random noise. You
> integrate this noise for some period of time, say 1-10 seconds, then run
> it through the FFT machine, and the output will show how much power is
> attributed to each slice of frequency within the input bandwidth. In our
> case, this will show one of two things:

> 1) A specific frequency within the bandwidth suddenly emerges as having
> more power than the other stuff (noise). We call this the "spectral
> line." It is then translated back to the receiver to figure out
> exactly what input RF frequency the spectral line is at. In our case,
> this will usually be the spectral line for some chemical element,
> usually hydrogen. It will be in the (about) 1200-1400 MHz region,
> depending on the doppler shift caused by how fast the object is moving
> away from the earth (called RED SHIFT in astronomical terms). Thus,
> from this FFT output information, it tells us what chemical elements
> are present in the object we are observing, what it's absolute
> velocity is, and what the temperature is, in degrees K, of the SOURCE.
> (I.e., how hot the source is at each frequency). This is because the
> FFT *does* provide you with accurate amplitude information *if* the
> signal is periodic. When you hear on the news that a new quasar was
> detected 8 million light years away moving at 0.7 times the speed of
> light and is 30,000 degrees hot ... it was all determined by the FFT!

> 2) If no spectral lines are present, then the output represents the
> average temperature of the source at that frequency. This is called
> "continuum power," (vs. spectral line power). Often we will observe an
> object at two different frequencies, say around 1.2GHz and 8GHz, run
> both frequencies through the FFT to determine the SOURCE temperature of
> each, which will be different. You plot the absolute temperatures
> (power) at different frequencies and will make a slope. The direction
> of the slope will tell you if the power from the source is thermal
> power (generated by burning gasses), or non-thermal power (power
> generated by strong magnetic fields, for example) ... and the magnitude
> of the slope tells you what the black body radiation constant is.

>

> If a non-periodic signal comes in from the VLA antennas, such as
> modulation from a %\$@#& cell phone, the power will be distributed over a
> wider bandwidth and will strike each VLA antenna at a different time, so
> it won't integrate very well (but will auto-correlate well). This allows
> us to tell which signals are coming from space, and which signals are
> terrestrial generated ... which in our case is always considered
> interference and we try to remove it. The FFT does much of the removal
> automatically.

>

> BTW ... this is one reason why the huge radio telescopes are almost
> worthless for detecting SETI signals. If alien signals were being
> received, which likely would be some form of modulation or random
> sequences of bursts (like the prime numbers in the movie "Contact,")
> well the FFT just kinda ignores them, because it takes a constant,
> periodic signal to be correlated into spectral information. Sorry!
>
> Slick stuff. A slick way to detect signals that are actually below the
> noise level. Not sure what application it would have to good old QRP
> HF communications (the result vs. the effort) -- although having said
> that, FFT's is the basis of DSP filtering. Cheaper to just get a
> canned DSP filter :-). A full-function FFT machine with floating point
> processor is several years pay for most of us -hi.
>
> 72, Paul NA5N
>
> PS - Although Chuck's initial question *is* a very good one and
> applicable. The faster the code speed, the higher the random distribution
> of power, and thus the more bandwidth consumed/required.
>

Date: Thu, 10 May 2001 15:03:46 -0700 (PDT)
From: Richard Fisher <ki6sn@yahoo.com>
To: qrp-l@lehigh.edu
Cc: KI6SN@yahoo.com, russ@natworld.com
Subject: [98011] Now Showing: The ARS Sojourner
Message-ID: <20010510220346.7910.qmail@web12107.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

On the occasion of the fifth anniversary of The Adventure Radio Society, the organization's monthly web magazine, The ARS Sojourner, brings you a multi-layered cake of delicious, celebratory reading - technical, operational and inspirational.

The May issue is free and just a click away at:

<http://www.natworld.com/ars>

Here's a look at what content is in store.

- + Sprint Sprinting: A Dispatch from the Arizona Trail, by Bruce Grubbs, N7CEE
- + The Feather Weight SMK, by Brian Wingert, N7RVD
- + A Binaural Processor for Any Rig, by Joe Street, VE3VX0

- + Celebrate: ARS' Fifth Birthday, and a Tribute to KK7B, by Richard Fisher, KI6SN, The ARS Sojourner
- + Bumblebees: The Initial Roster, by Russ Carpenter, AA7QU
- + Hail and Farewell: Bill Jones, KD7S, Leaves The ARS Sojourner, by Richard Fisher, KI6SN
- + High Points Chronicles: More Summits Fall, Including the District of Columbia, by Richard Fisher, KI6SN
- + Update on The ARS Rendezvous, by Russ Carpenter, AA7QU
- + Results and soapbox comments from the May Spartan Sprint, with special recognition of division champions N7RVD and WA9TZE, by The ARS Sojourner
- + Wilderness Alerts for May and beyond (regularly updated), by The ARS Sojourner
- + From Our Vantage Point: Documenting the Call of the Wild, by The ARS Sojourner
- + Who's Who and Who's New: New Members of the Adventure Radio Society, by Richard Fisher, KI6SN
- + Upcoming ARS events, including the Spartan Sprint on June 4, by The ARS Sojourner

On behalf of webmaster Russ Carpenter, AA7QU, The ARS Sojourner staff and contributing writers, we hope you enjoy this month's magazine, and appreciate your feedback and editorial contributions for coming editions.

Vy 72,

Richard Fisher, KI6SN
Executive editor, The ARS Sojourner
Riverside, CA
KI6SN@yahoo.com

Do You Yahoo!?
Yahoo! Auctions - buy the things you want at great prices
<http://auctions.yahoo.com/>

Date: Thu, 10 May 2001 18:03:57 -0400
From: "Ed Tanton" <n4xy@att.net>
To: "QRP-L Reflector" <qrp-l@Lehigh.EDU>
Cc: "Boatanchors-Tempe" <BOATANCHORS@LISTSERV.TEMPE.GOV>, "Boatanchors Reflector-Jack" <boatanchors@theporch.com>, "CW Reflector" <cw@qth.net>, "Homebrew Reflector" <homebrew@qth.net>
Subject: [98012] Magnifying Glasses
Message-ID: <CKEGICNFDIMCEKEDCEHFIEFFHBAA.n4xy@att.net>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I got a very valuable thing today: a CLIP-ON pair of FLIP-UP Magnifiers. I already had the headband-style magnifiers... and they're great... BUT here's the problem: with them 'down' you can see the pc board/solder joint/whatever just fine. Because I couldn't wear my glasses under them, with them 'up' everything (more-or-less) blurred out.

Enter the CLIP-ON magnifiers. They clip onto your reading glasses/etc. and can flip up when you do not need the extra magnification. Awesome solution. Building my K2, I would normally have on my regular glasses (+2.0 diopters to +3.5 [whatever]) but EVERY time I needed a CLOSE look it was swap from the glasses to the headband. I tried wearing a pair under the headband, but the distances were-very-wrong.

So today, after getting the CLIP-ONs, I bought a pair of +3.5 diopter glasses (the clip-ons need a relatively large-framed eyeglass) for 1/2 off at Eckerd's (\$10). I'll use 'em exclusively for electronics, and ought to get terrific life out of them. The construction is injection-molded acrylic treated with an abrasion-resistant coating-they claim it is so scratch-resistant that it can withstand rubbing with steel wool. I'll restrain myself.

The brand is: "TELESIGHT MAGNIFIER" specifically model #23 (or the label says #EL623) for 1.75 magnification at 14 inches. I got mine from my local radio emporium (Ack Industrial Electronics in Atlanta) but it was a special order. I have seen them in tool catalogs similar to Jensen. Price class is \$31.00.

73 Ed Tanton N4XY <n4xy@arrl.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

R-390: Motorola SN: 374;
R-390-A: Capehart SN: 2241
51S-1 WE SN: 4389
HRO-50; HRO-60; & HRO-500
SP600-VLF SP600-JX-17 SP-600-JX-21

Date: Thu, 10 May 2001 15:44:25 -0700
From: "Davies, Doug A FOR:EX" <Doug.Davies@gems3.gov.bc.ca>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [98013] Re: This Fourier Transform stuff
Message-ID: <60F1FEB31CA3D211A1B60008C7A45F43099802BA@blaze.bcsc.gov.bc.ca>
Content-return: allowed
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Very interesting dissertation, Paul. But I just can't get my head around how a signal that is one millionth of one trillionth of a watt can be detected by anything. That's what the strength of the latest transmission from Pioneer 10 was reported to be.

Doug VA7DD

MailTo:Doug.Davies@gems3.gov.bc.ca

Date: Thu, 10 May 2001 18:45:21 EDT
From: DYARNES@aol.com
To: agtaylor@llnl.gov, qrp-1@lehigh.edu
Subject: [98014] Re: NorCal toroids arrive
Message-ID: <67.13e82e68.282c7401@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 5/10/01 8:45:38 AM US Mountain Standard Time, agtaylor@llnl.gov writes:

<< Finally, we get something out here before our east coast brethren... the NorCal Toroid kit arrived yesterday in 'much cooler' Pleasanton CA. Thanks to the NorCal gang for another great kit! >>

I got mine too! Thanks to Jim and Doug for all the effort.

Dave W7AQK

End of QRP-L Digest 2185

